

Amendment
Serial No. 10/524,734
Docket No. AAR04-GN002

REMARKS

Status of the Claims

Claims 1, 6-15, and 20-27 are currently pending. Claims 28-87 were previously canceled. Claims 2-5 and 16-19 have been canceled herein without prejudice and claims 1, 6, 15, and 20 have been amended herein. Claims 1-27 were rejected in the Office action mailed February 6, 2008.

Amendments to the Claims

Claim 1 has been amended to recite, "transmitting a snapshot image to one or more remote viewers in response to the detection, in the stream, of a repetition of a substantially static image."

Claim 15 has been amended to recite, "Computer program code stored on a computer readable medium" and "instructions for transmitting a snapshot image to one or more remote viewers in response to the detection, in the stream, of a repetition of a substantially static image."

Support for the amendments to claims 1 and 15 may be found, for example, in original claims 5 and 19, both of which include transmitting a snapshot in response to the detection in the stream of a "substantially static image."

Claim 6 has been amended to depend from claim 1 and claim 20 has been amended to depend from claim 15.

Rejections Under 35 U.S.C. § 101

Claims 15-27 stand rejected under 35 U.S.C. § 101 as being directed to nonstatutory subject matter.¹ It is respectfully submitted that the amendments to claim 15 overcome this rejection. Specifically, claim 15 has been amended to recite "A computer program code stored on a computer readable medium." Withdrawal of the rejections of claims 15 and 20-27 under 35 U.S.C. § 101 is respectfully requested.

¹ Claims 16-19 have been canceled herein, thus mooted their rejections under 35 U.S.C. § 101.

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Rejections Under 35 U.S.C. § 102(b)

Claims 1-3 and 15-17 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 6,172,672 to Ramasubramanian et al.² ("Ramasubramanian"). It is respectfully submitted that these rejections have been overcome by the amendments to claims 1 and 15 herein.

The invention of claim 1 defines a method of delivering visual information to viewers. The visual information is obtained using a video camera, transmitted in real-time from the camera to a server for processing, and then transmitted as a video stream over the Internet or like communications network to remote viewers. Notably, the invention allows the transmission to viewers of snapshot images, along with the transmitted video stream. The snapshot images, however, are not specifically requested by viewers (such as by pressing a 'camera' button on their user interface) but are instead *automatically* generated and transmitted in response to the detection of a particular characteristic of the video stream, namely a substantially static image in the stream. Ramasubramanian merely discloses delivering snapshots after they are specifically requested by a viewer by pressing the 'camera' button on their user interface. There is no disclosure or suggestion of the *automatic* delivery of snapshot images and no disclosure of automatic delivery in response to the detection in the video stream of a substantially static image.

Claims 1 and 15 have been amended to recite, "transmitting a snapshot image to one or more remote viewers in response to the detection, in the stream, of a repetition of a substantially static image."³ Importantly, "the stream" refers to "a stream of video data transmitted from a video camera"⁴ or "a stream of video data [that is transmitted] to one or more remote viewers over a communications network."⁵

In direct contrast, Ramasubramanian discloses transmitting a snapshot image in response to a command from the user. "In response to the message from client 110,

² The rejections of claims 2, 3, 16, and 17 under 35 U.S.C. § 102(b) are moot as these claims have been canceled herein.

³ Emphasis added.

⁴ Claim 1.

⁵ Claim 15.

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video compressor 120 locates the frame specified in the message and transmits the video information that corresponds to the frame from video file 104 with little or no compression.”⁶ Notably, the “message” is manually initiated by the user,⁷ and is thus the snapshot image is not transmitted “in response to the detection, in the stream, of a repetition of a substantially static image” as required by each of claims 1 and 15.

Additionally, regarding claim 1, it is respectfully submitted that the cited reference fails to disclose another element of the claim. Claim 1 requires “a stream of video data transmitted from a video camera.” The Office action asserts that this limitation is disclosed at column 5, line 23. Although the word “camera” is indeed included in column 5, line 23, it is readily apparent even from a cursory reading of the entire paragraph⁸ that the reference is merely describing an exemplary graphical button on a user interface that depicts a camera. Contrary to the assertion in the Office action, Ramasubramanian does not disclose the claim limitation requiring “a stream of video data transmitted from a video camera.”

For at least these reasons, it is respectfully submitted that Ramasubramanian does not disclose each and every element of claims 1 and 15. Accordingly, claims 1 and 15 are novel over Ramasubramanian. Withdrawal of the rejection of claims 1 and 15 under 35 U.S.C. § 102(b) is respectfully requested.

Rejections Under 35 U.S.C. § 103(a)

Claims 4-14 and 18-27 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Ramasubramanian in view of U.S. Patent Application Publication No. 2001/0004739 to Sekiguchi et al. (“Sekiguchi”).⁹

Applicants disagree with the Examiner’s contention that Sekiguchi discloses the feature of detecting the repetition of a substantially static image in a video stream. Sekiguchi is concerned with a system for indexing static and moving images by

⁶ Col. 5, ll. 34-37.

⁷ See, for example, col. 6, ll. 57-59: “When a user selects the camera button, processor 122 transmits a message to server 132 to indicate that the camera button was selected.”

⁸ Col. 5, ll. 22-33.

⁹ The rejections of claims 4, 5, 18, and 19 under 35 U.S.C. § 103(a) are moot as these claims have been canceled herein.

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extracting "image characteristic values" from the image data so as to provide for more efficient searching and retrieval of image data. There is no disclosure of detecting the repetition of a static image within a stream of video data, and certainly no teaching of the use of such a feature to automatically trigger the transmission of snapshot images.

The Office action appears to assert that the repetition of a search process performed on stored data discloses the limitation of claims 5 and 19 (now included in claims 1 and 15) that requires "the detection, in the stream, of a repetition of a substantially static image."¹⁰ As discussed above, "the stream" refers to "a stream of video data transmitted from a video camera"¹¹ or "a stream of video data [that is transmitted] to one or more remote viewers over a communications network."¹² Performing a search for data having certain characteristics, even if the search is performed repeatedly, is simply not the same as detecting the repetition of a substantially static image in a stream of video.

Even assuming, for purposes of argument only, that Sekiguchi discloses the detection of the repetition of a substantially static image in a stream of video data, neither Ramasubramanian nor Sekiguchi discloses taking any action based on such a detection. In contrast and as discussed above, Ramasubramanian provides snapshot images in response to a request from a user. Sekiguchi provides search results in response to a user's search query. In view of these references, it would not be obvious to one of ordinary skill in the art to transmit a snapshot image to one or more remote viewers in response to the detection, in the stream, of a repetition of a substantially static image.

The rejections of the claims depending from claims 1 and 15 are uniformly deficient in that most merely identify the mention of certain key words taken entirely out of context. For example, the Office action asserts that Sekiguchi discloses the limitations

¹⁰ The paragraph on page 6 of the Office action discussing claim 5 is virtually incomprehensible: "In an analogous art, Sekiguchi et al disclose wherein the attribute is the repetition (Therefore, the re-retrieval is performed by repeatedly performing the retrieval processing in the step ST37 to step ST41 while using the renewed search priority 241, and the production of the for-retrieval descriptor data and the retrieval processing in the image retrieval processing shown in FIG. 17 is completed 296) of a substantially static image (because only static images are processed in the image retrieval, it is difficult to retrieve a desired moving image, 0008)."

¹¹ Claim 1.

¹² Claim 15.

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of claims 6 and 20 not disclosed in Ramasubramanian. In particular, the Office action asserts that Sekiguchi teaches, "the substantially static image is detected by comparing a frame to a plurality of other frames in the stream, wherein the substantially static image is detected when the frame is similar to each of the other frames." This assertion is erroneous—Sekiguchi does not teach the detection of a static image in a stream of video data.

The Office action asserts that paragraph 0155's statement that "each characteristic descriptor is compared with threshold values" somehow discloses the limitation in claim 6 requiring "comparing a frame to a plurality of other frames in the stream." This assertion is manifestly erroneous on its face. Further, the Office action asserts that "the substantially static image is detected when the frame is similar to each of the other frames (similar image with characteristic descriptor sets of the other images, 0149)." In fact, paragraph 0149 discusses retrieving images based on similar characteristics and discloses nothing about detecting a substantially static image in a stream of video data.

As another example, regarding claims 11 and 25 the Office action asserts that Sekiguchi discloses "wherein the snapshot image transmitted to the view is an average frame calculated from the frame and each of the other frames (see fig. 7, step 15-1, and calculation of average)." Simply reading paragraphs 0110 and 0111 discloses that Fig. 7 depicts the procedure of step ST15 of Fig. 6. Most importantly, step ST15 is an average of certain characteristics performed on a single frame; thus, it has nothing to do with "an average frame calculated from the frame and each of the other frames."

Regarding claim 12, the Office action asserts that Sekiguchi discloses the steps of "comparing the frame to the most recently transmitted snapshot image; and transmitting a further snapshot image only when the frame and the most recently transmitted snapshot image are sufficiently different." Once again, the Office action erroneously considers comparison with a threshold value to comparison of one frame to another frame. Further, the Office action asserts that Fig. 5's mere mention of "luminance" and "color difference" somehow discloses "transmitting a further snapshot image only when the frame and the most recently transmitted snapshot image are sufficiently different." A

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figure's mention of these two characteristics in no way discloses detecting such differences and taking action when they are "sufficiently different."

Each of the claims depending from claims 1 and 15 is patentable over the cited combination of references for at least the reasons discussed above. For purposes of brevity, redundant and additional arguments for the patentability of these claims have not been included herein.

Withdrawal of the 35 U.S.C. § 103(a) rejections of claims 6-14 and 20-27 is respectfully requested.

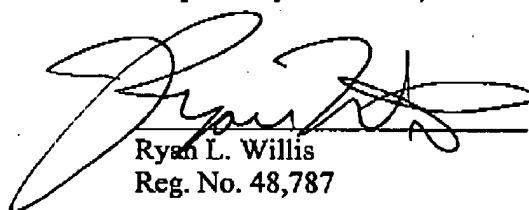
Conclusion

In light of the foregoing, it is respectfully submitted that claims 1, 6-15, and 20-27, as amended, are patentably distinct from the references cited and are in condition for allowance. Reconsideration of the application and withdrawal of the rejections and objections of record are respectfully requested.

The Commissioner for Patents is hereby authorized to charge any fees that may be required by this paper, or to credit any overpayment, to Deposit Account 50-3072.

If the Examiner wishes to discuss any aspect of this response, please contact the undersigned at the telephone number provided below.

Respectfully submitted,



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